

REMARKS

Objection to Abstract

The examiner objects to the abstract as in improper form. The abstract has been amended, and is believed to be acceptable.

Rejection of Claims 1-32 under 35 U.S.C. § 112

The examiner rejects claims 1-32 as indefinite. Claims 1, 13, and 24 have been amended in a manner believed to overcome the rejections. Additional housekeeping amendments also have been made which do not narrow the scope of the claims.

Rejection of Claims 1-13, 15, and 18-32 under 35 U.S.C. § 103

The examiner rejects claims 1-13, 15, and 18-32 as obvious over Edlund (6,383,670) in view of Yamase (5,284,717).

-Response

In order to establish that the claims are *prima facie* obvious over the prior art, the examiner must point to two things in the prior art, and not in the applicant's disclosure--(1) the suggestion of the invention, and (2) the expectation of its success. *In re Vaeck*, 20 U.S.P.Q.2d 1438, 1442 (Fed. Cir. 1991). The examiner has not met this burden.

All of the pending claims include the following limitation:

subjecting the hydrocarbonaceous feedstock to a treatment with hydrogen in the presence of a supported catalyst thereby producing a hydrotreated feedstock comprising a hydroprocessed product.

Claim 1. All of the pending claims also include the following limitation(s):

subjecting part or all of the remaining hydrotreated feedstock and the hydroprocessed product if it is not recovered to a treatment to produce hydrogen, **recycling at least a part of the hydrogen to step a)**, and subjecting part or all of the hydrogen not used for step a) to a treatment to produce electricity, or subjecting part of the hydrotreated feedstock and the hydroprocessed product if it is not recovered to a treatment to produce electricity and at least part of the remainder to a treatment to produce hydrogen and **recycling at least a part of the hydrogen to step a)**.

The claims were amended to add the bolded phrase "**recycling at least a part of the hydrogen to step a)**." However, this feature was already inherent in the claims via the phrase "subjecting part or all of the hydrogen not used for step a) to a treatment to produce electricity." The amendment does not narrow the claims.

The examiner admits that Edlund does not disclose the required hydrotreating process. The examiner also has not pointed to a teaching or suggestion in Edlund to recycle hydrogen back to treat the feedstock.

Edlund teaches that “[f]uel processor 16 converts the feedstock into hydrogen gas, at least a significant portion of which is typically delivered to fuel cell stack 14.” Edlund, col. 2, ll. 31-33. Edlund also teaches that “[s]ome or all of the produced hydrogen may alternatively be delivered via stream 54 to a storage device 56.” Edlund, col. 4, ll. 47-49. However, the examiner has not pointed to a teaching or suggestion in Edlund either (a) to recycle hydrogen, or (b) to use the recycled hydrogen to hydrotreat the feedstock.

The examiner argues that Yamase et al. supplies the necessary motivation to modify Edlund. According to the examiner, Yamase teaches “an improved cracking and desulfurizing step utilizing catalysts that improve the cracking rate thereby enabling the use of more diverse source fuels for generating electricity thereby improving the overall electricity generation process and providing energy savings.” From this, the examiner concludes that it would have been obvious to modify Edlund “by incorporating the raw material, the desulfurizer and the adsorber of Yamase et al.”

First of all, **the examiner has not pointed to a teaching or suggestion in Edlund or in Yamase to recycle hydrogen back to hydrotreat a feedstock.** Even assuming that Yamase provided motivation to combine the references, the resulting combination would not teach or suggest all of the limitations of the pending claims.

And, the examiner not established the required motivation. In order to establish the required motivation to modify Edlund, the examiner has the burden to point to a teaching or suggestion **in the references themselves** that it would be desirable to make the required modification. *In re Brouwer*, 37 U.S.P.Q.2d 1663, 1666 (Fed. Cir. 1995). The examiner’s argument is not a legally sufficient to meet this burden.

CONCLUSION

For all of the foregoing reasons, Applicant respectfully requests entry of the foregoing amendments, reconsideration and allowance of all of the pending claims.

Respectfully submitted,

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